

## California Air Resources Board

### Summary of Prospective Inventory Projects for Workshop Discussion

<b><i>Possible Future Projects - For discussion at workshop</i></b>	
1	Estimate Unpaved Road Travel VMT Using GIS Land-Use Attributes - Phase II
2	Evaluation of PM Entrainment, Deposition, and Transport of Geologic Dust from Unpaved Roads and Agricultural Lands
3	Residential Wood Combustion Emissions Estimation
4	Creating a Statewide Spatially and Temporally Allocated Agricultural Burning Emission Inventory
5	Chemical & Size Speciation Projects
6	Developing Surrogates for Spatial Allocation of PM2.5
7	Livestock Activity Data and Factors That Influence Livestock Ammonia Emissions
8	Windblown Dust Emissions

Suggestions from workshop participants

## Other Selected ARB Particulate Matter Inventory Related Studies for Background Discussion

(These projects will not be discussed in detail at the workshop, but are provided for background information )

<b>California Regional PM Air Quality Studies</b>	
CR-1	Organic Chemical Speciation
CR-2	Day Specific Micro-inventories
CR-3	Ammonia Studies (possibly soils, residential & commercial fertilizer use, urban ammonia)
CR-4	Dust Suspension Characteristics
CR-5	On-Road Vehicle Emissions and Traffic Count Estimates
CR-6	Geologic material identification and speciation (TSS12)
CR-7	Livestock ammonia measurements and other ammonia measurements (TSS 15 and USDA work)
CR-8	Agricultural operations PM dust measurements

<b>Motor Vehicle &amp; Mobile Source Projects</b>	
RD-1	Testing for Exhaust Emissions of Diesel Powered Off-Road Engines
RD-2	Characterization of Particulate Matter Emissions from Gasoline-Fueled Vehicles
RD-3	Impact of Reformulated Fuels on Particle and Gas-Phase Emissions from Motor Vehicles
RD-4	Speciation Profiles of Emissions From Combustion of Reformulated Diesel and Gasoline Fuels
RD-5	Physical & Chemical Characterization of Size-Segregated PM Emissions from Gasoline and Diesel-Powered On-Road MV
RD-6	Physical and Chemical Characteristics of Ultrafine and Nanoparticle PM from Gasoline and Diesel On-Road MV plus Tire
RD-7	Development of Software for Spatially and Temporally Resolving Motor Vehicle Activity Data
RD-8	Emissions Testing of Low-Emitting Two-Stroke Utility Engine for Criteria Pollutants, PM10, and PM2.5
RD-9	Measurement and Modeling of PM10 and PM2.5 Emissions from Paved Roads in California
MS-1	Duty-Cycle Testing for Personal Watercraft and Motorcycles
MS-2	Testing at LA MTA facility
MS-3	Ammonia Emissions from Motor Vehicles
MS-4	Particulate Emissions from Marine Outboard Engines, Personal Watercraft, and Small Off-Road Equipment

<b>Other PM Related Research</b>	
RD-10	Remote Sensing Atmospheric Ammonia Using NOAA's mini-MOPA CO2 Lidar in Central California
RD-11	Flux Measurements of Ammonia to Estimate Emission Factors and Operation of NOy Network
RD-12	Aerosol Time-of-Flight Mass Spectrometry (ATOFMS)
RD-13	Biological Markers for Characterization of Potential Sources of Soil-Derived and Geological Fugitive Dust
RD-14	Determination of Elemental Carbon, Organics, and Source Contributions to Particles During SC Childrens Health Study
El-1	Simulation and Analysis of Factors Leading to High PM Emission Fluxes Using an Environmental Wind Tunnel (#97-718)
El-2	Estimate Unpaved Road Travel VMT Using GIS Land-Use Attributes (#96-722)
El-3	Estimate and Model Ammonia Emissions from Fertilizer Use and Background Sources (#98-716)
El-4	Develop a Method and Collect Activity Data for Charbroiling and Other Commercial Cooking Operations (#98-721)
El-5	Creating a Statewide Spatially and Temporally Allocated Forest Burning Emission Inventory (#98-726)
El-6	Directly Measured Particulate Matter Produced by Vehicle Travel over Paved Roads (#98-723)